



# ***Office of the Army Surgeon General***

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## **CHLAMYDIA**

**COL P.K. Underwood  
Deputy Functional  
Proponent for Preventive  
Medicine  
Office of the Surgeon  
General**

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# *U.S. Army*

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- Agenda
  - Key Issue
  - Background
  - Chlamydia Testing Policy-US Army
  - Data
  - Analysis
  - Caveats
  - Conclusions
  - Recommendations



## *Key Issue*

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- **January 2005, Dr. Ostroff requested Dr. Winkenwerder to assist in instituting the following AFEB recommendations:**
  - **All new female recruit accessions should undergo screening to detect chlamydia infection**
  - **All female military service members should be routinely screened for chlamydia at the time of routine PAP smear up until 25 years of age**
  - **Appropriate education program should be developed and disseminated to all recruit accessions**

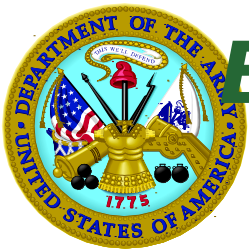


# Background on Chlamydia Testing

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- The U.S. Preventive Services Task Force (USPSTF) strongly recommends that clinicians routinely screen all sexually active women aged 25 years and younger, and other asymptomatic women at increased risk for infection, for chlamydial infection
- *Rationale:* The USPSTF found good evidence that screening women at risk for chlamydial infection reduces the incidence of pelvic inflammatory disease and fair evidence that community-based screening reduces prevalence of chlamydial infection. The USPSTF makes no recommendation for or against routinely screening asymptomatic low-risk women in the general population for chlamydial infection.

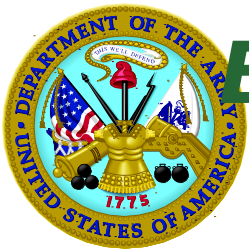




# ***Background on Chlamydia Testing***

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- **The U.S. Preventive Services Task Force (USPSTF) also recommends that specific risk-based screening protocols need to be tested at the local level, as prevalence of chlamydia infection varies widely among communities and patient populations**



# ***Background on Chlamydia Testing***

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- **AFEB recommended that all female recruits should be screened during basic training, unless evidence is available that an equally effective program already exists**
- **The Navy and Marines, but not the Army and Air Force have adopted routine recruit screening**



# *Chlamydia Testing Policy*

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## *U.S. Army*

- **Army screens all female military service members up until the age of twenty-five years during their annual, routine PAP smear screening pelvic exams**
- **Male and female service members of any age are tested for chlamydia infection during appropriate medical encounters as clinically indicated by symptoms or risk factors for sexually transmitted disease**



# ***Data on Chlamydia Testing/Outcomes***

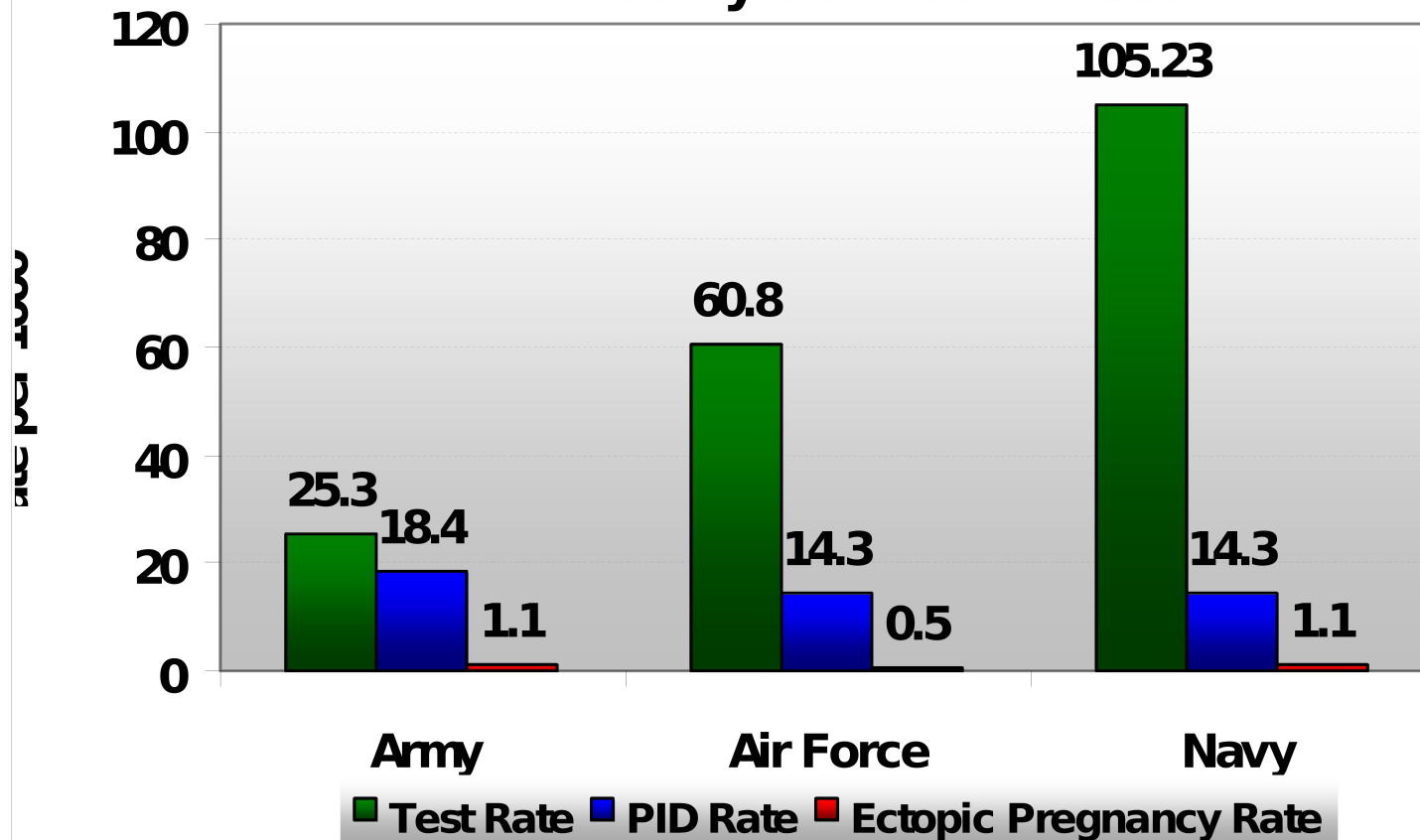
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- **Source: Management Analysis and Reporting Tool (MHS)**
- **All chlamydia testing on female AD, age 25 and younger in USN, USAF and USA, per 1000**
- **Rates of PID and ectopic pregnancies in all female AD in USN, USAF and USA, per 1000**



# *Data on Chlamydia Testing/Outcomes*

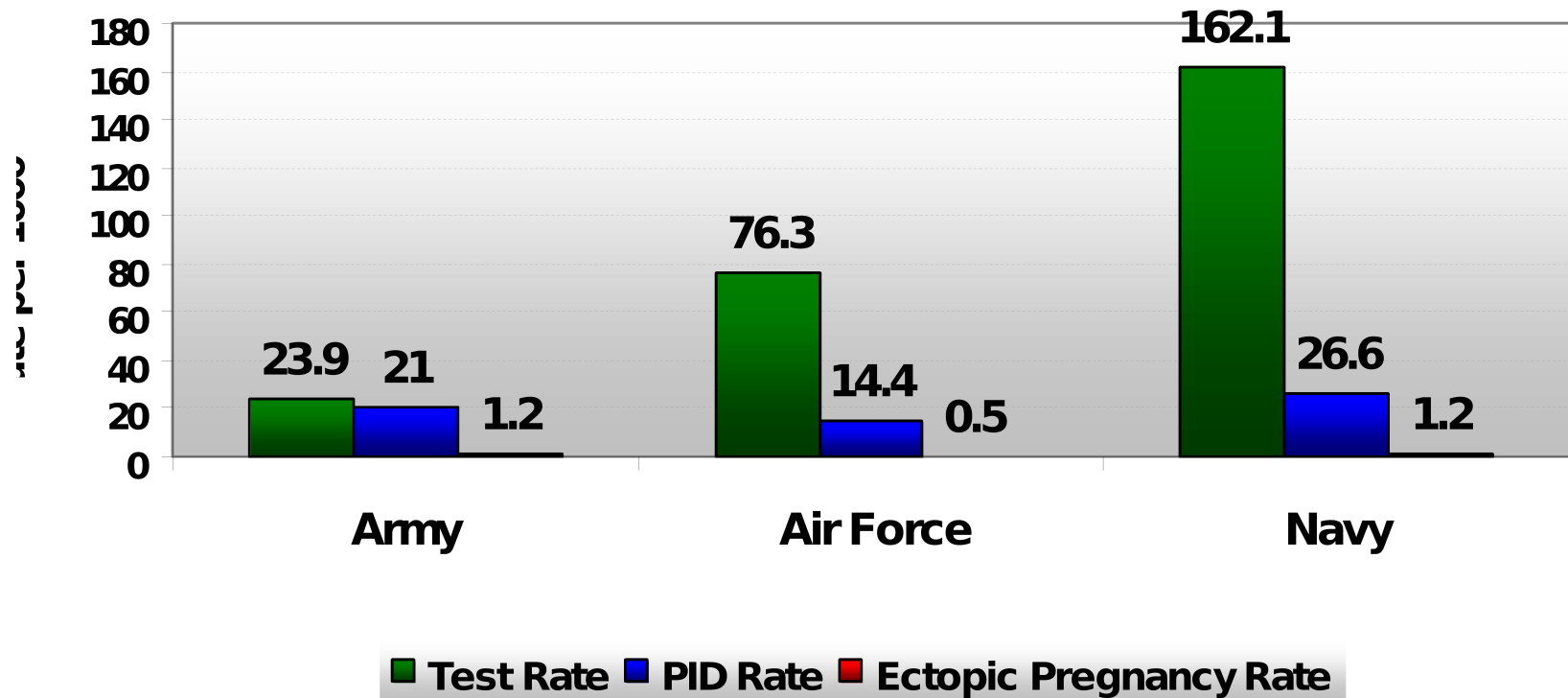
**Chlamydia Testing, PID and Ectopic Pregnancy Rates by Service in 2000**





# *Data on Chlamydia Testing/Outcomes*

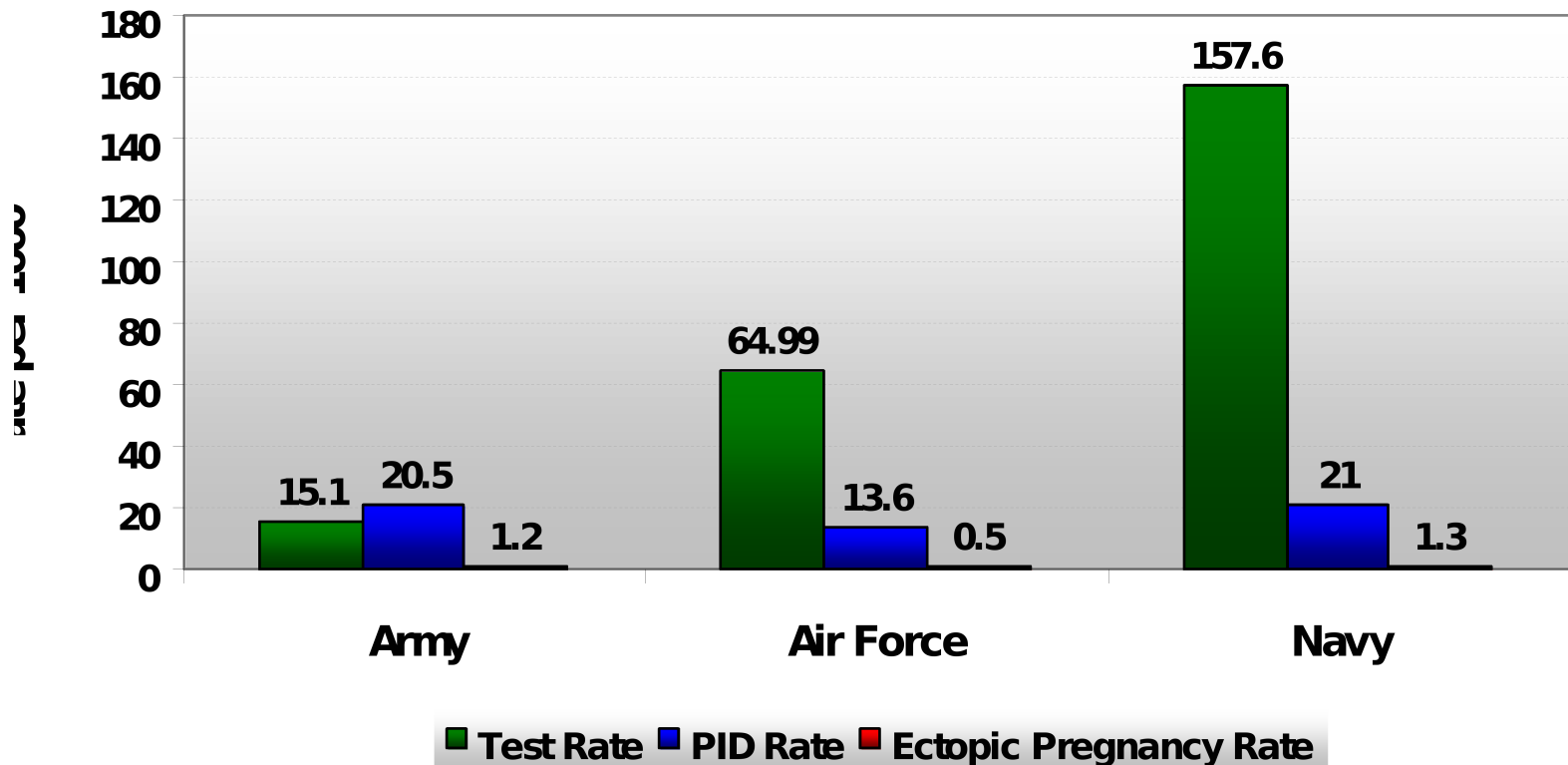
## **Chlamydia Testing, PID and Ectopic Pregnancy by Service in 2001**





# Data on Chlamydia Testing/Outcomes

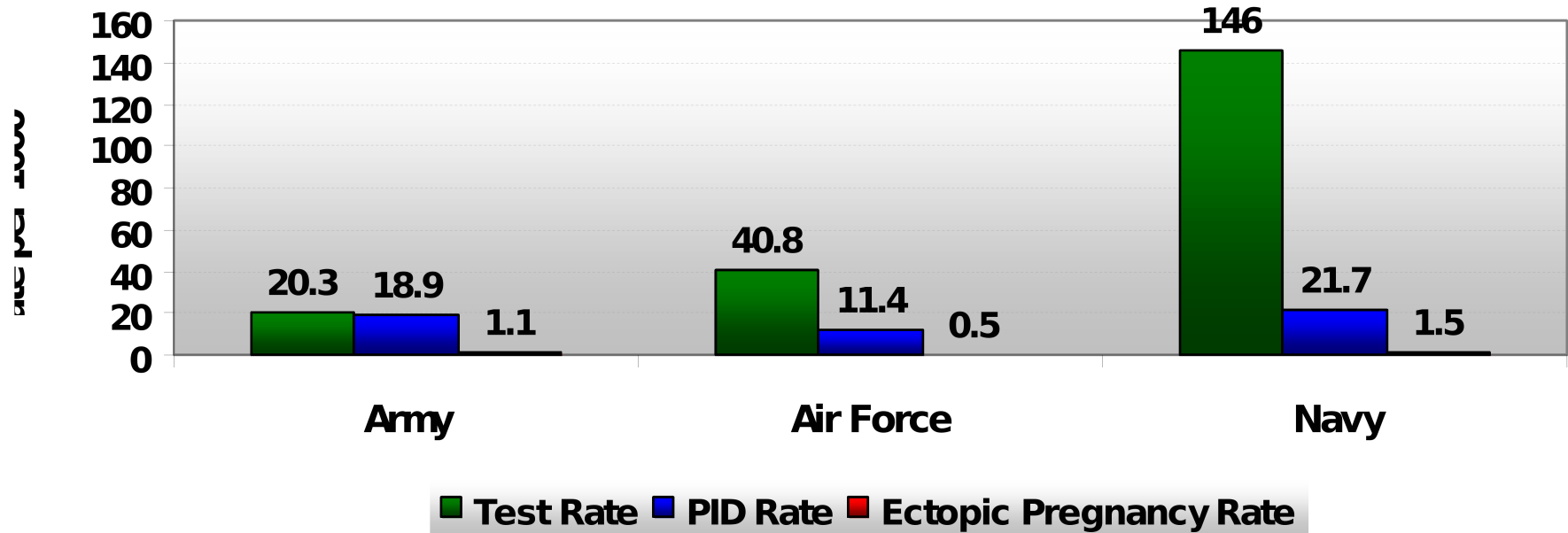
## Chlamydia Testing, PID and Ectopic Pregnancy Rates by Service in 2002





# Data on Chlamydia Testing/Outcomes

## Chlamydia Testing, PID and Ectopic Pregnancy Rates by Service in 2003

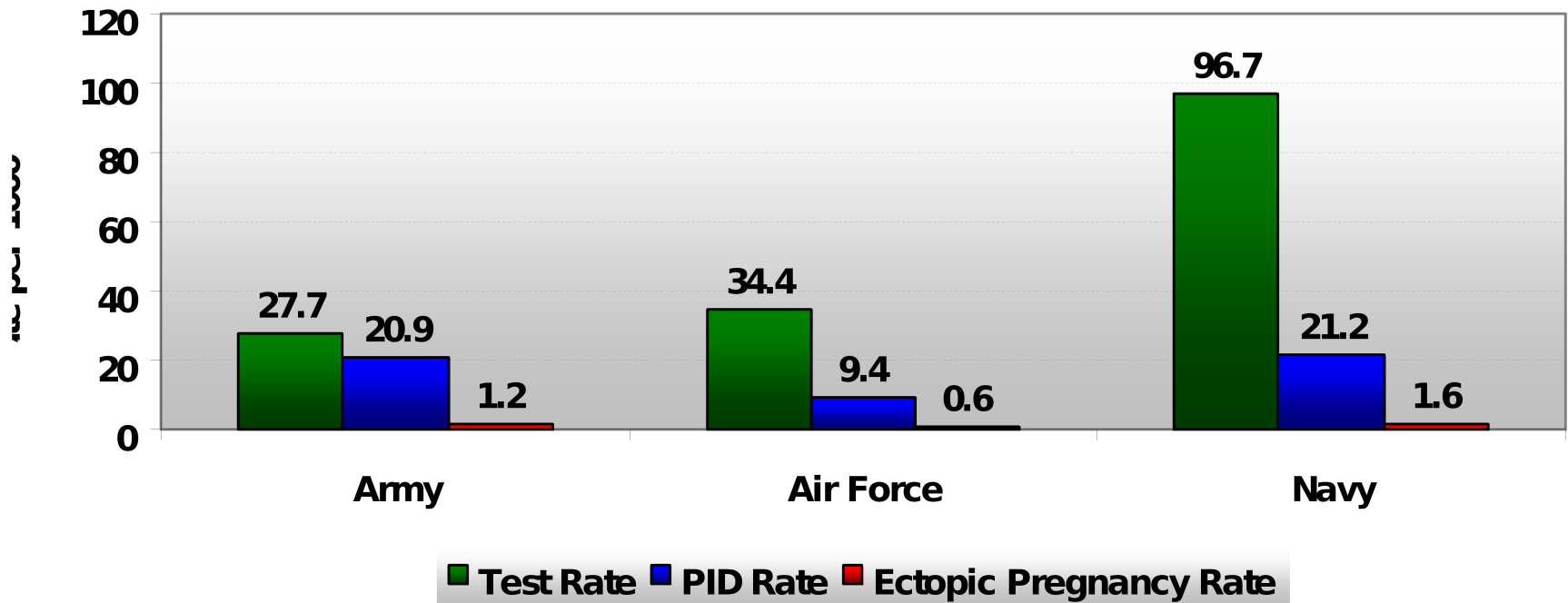






# Data on Chlamydia Testing/Outcomes

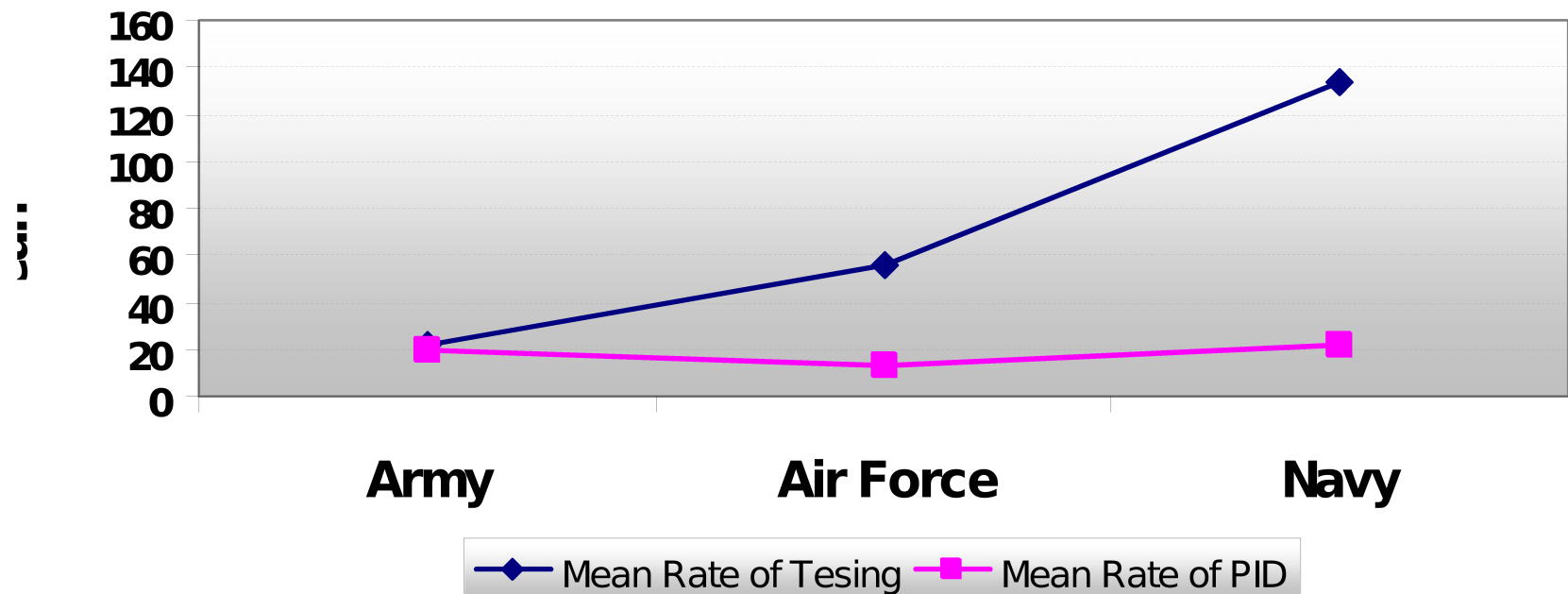
## Chlamydia Testing, PID and Ectopic Pregnancy Rates by Service in 2004





# Data on Chlamydia Testing/Outcomes

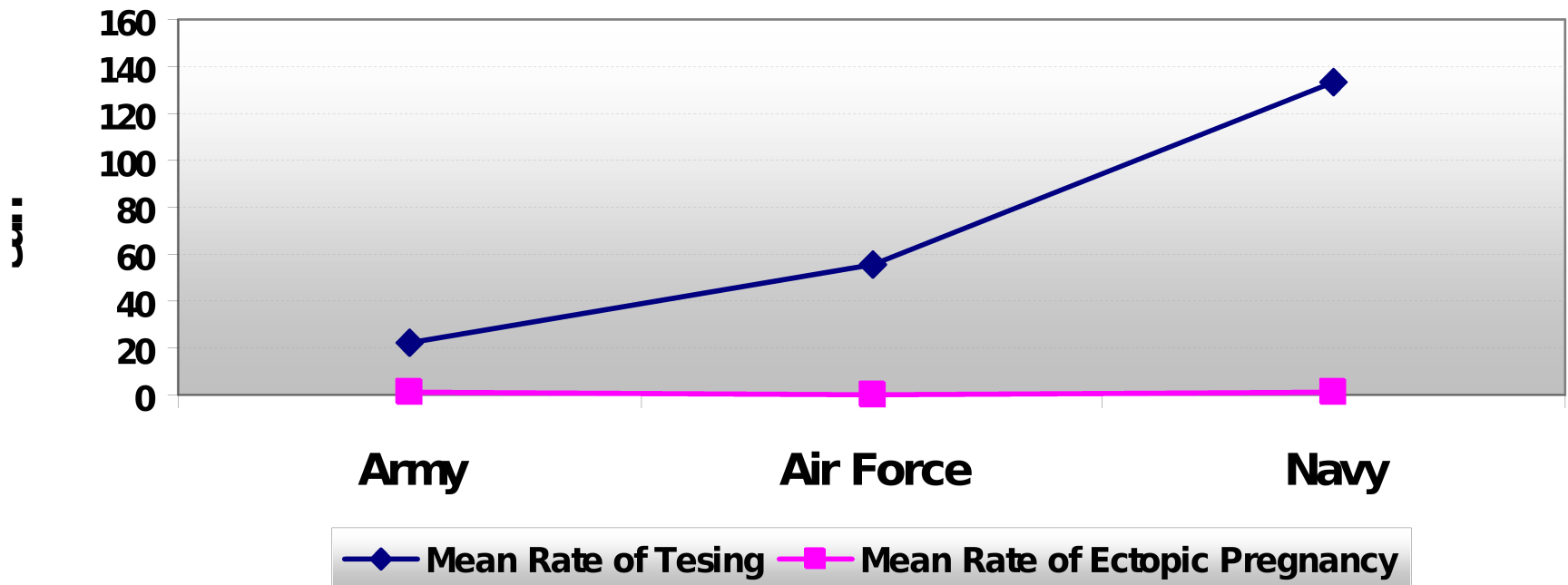
**Comparison between  
Mean Rates of Testing and PID  
(2000-2004)**





# ***Data on Chlamydia Testing/Outcomes***

## **Comparison between Mean Rates of Testing and Ectopic Pregnancy (2000-2004)**





# ***Data on Chlamydia Testing/Outcomes***

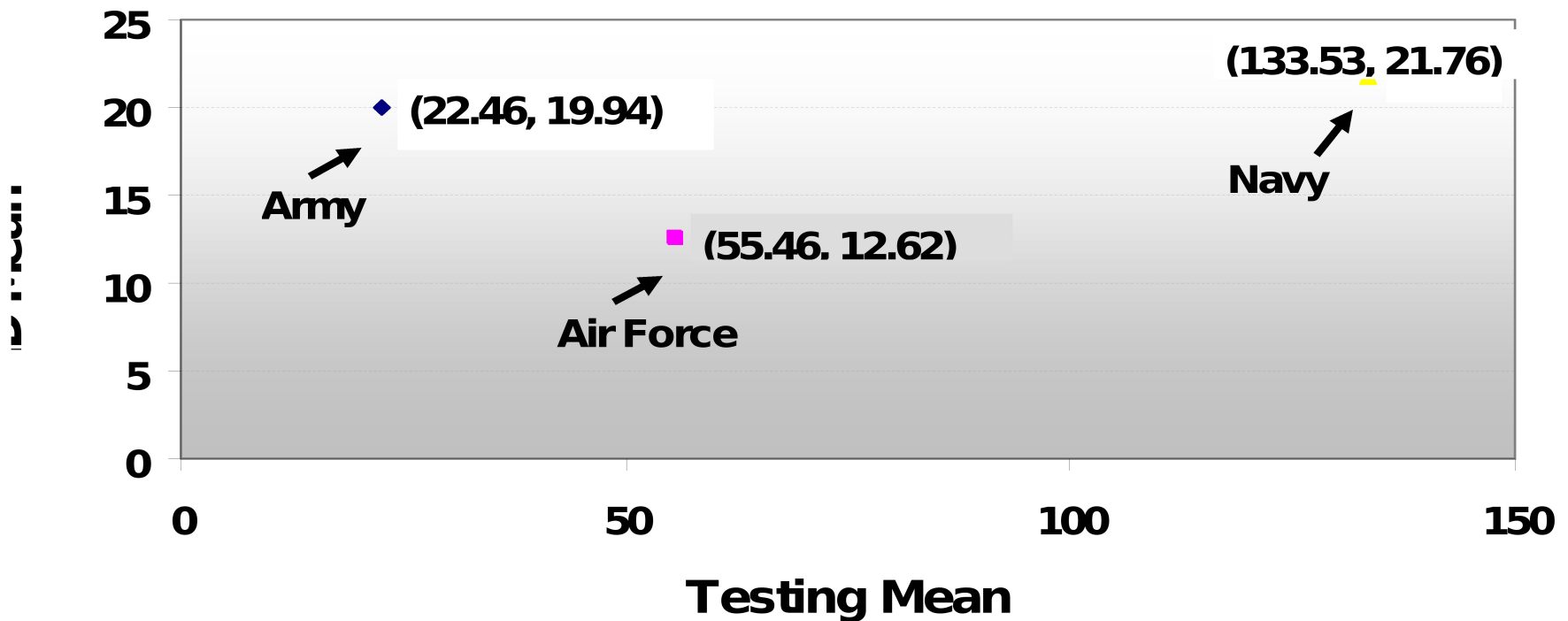
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- **One would expect that increased testing for chlamydia would demonstrate a concomitant decrease in adverse outcomes of chlamydia infections.**
- **If this were true, the linear relationship as depicted on a scatter diagram would appear as a downward sloping line, such that increased testing would result in lower rates of PID and ectopic pregnancy**



# Data on Chlamydia Testing/Outcomes

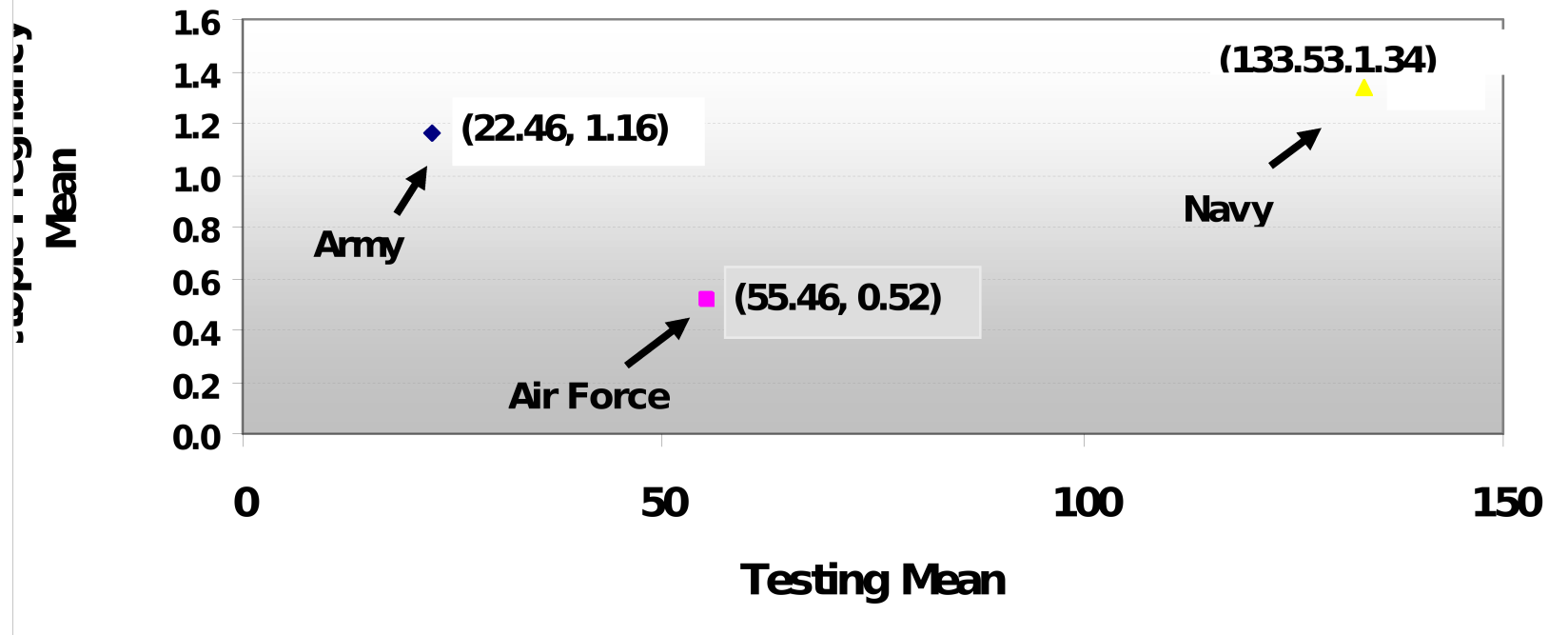
**Relationship of Testing Mean to PID Mean  
by Service**  
**Army (Blue) USAF (Pink) USN (Yellow)**





# Data on Chlamydia Testing/Outcomes

**Relationship of Testing Mean to Ectopic Pregnancy Mean by Service**  
**Army (Blue) USAF (Pink) USN (Yellow)**





# *Analysis*

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- **In a linear relationship, the sample correlation coefficient ( $r$ ) should approach -1**
- **$r = 0.41$  (mean rate of testing and mean rate of PID)**
- **$r = 0.43$  (mean rate of testing and mean rate of ectopic pregnancy)**
- **In spite of testing differences among USA, USAF and USN, prevalence patterns of PID and ectopic pregnancy are fairly consistent across all services**



# *Caveats*

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- **The data comprise a four year period from 2000 to 2004**
- **Women who are tested under 25 may have left the service before an adverse outcome was known and captured in the data**





# *Conclusions*

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- **This analysis does not support targeted testing for recruits, as increased testing by the USN does not appear to have had a demonstrable effect on decreasing prevalence of adverse outcomes**



# ***Recommendations***

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- **Continue efforts to improve compliance for screening for chlamydia at the time of regular, annual PAP smear examinations in AD females 25 and younger**
- **Continue efforts to provide sex education to all recruit accessions**
- **Continue to follow trends of adverse outcomes**



# *Data on Chlamydia Testing/Outcomes*

**Chlamydia Testing, PID and Ectopic Pregnancy Rates by Service in 2000**

